DEPARTMENT OF THE AIR FORCE **Confined Space MASTER ENTRY PLAN MAB -001**
OO ALC/ MAB Aircraft Division
Maintenance Directorate
OGDEN AIR LOGISTICS CENTER (AFMC)
HILL Air Force Base, Utah 84056 **Date of Plan: 18 June 2003**

LOCATION: C-130 PDM docks in 225, 204, outside fuel docks at 236 and 227, Flight Test Ramp east of Building 233 or any other approved outside location for C-130 Aircraft Maintenance.

1. Description of Workplace: Fuel Cells/Tanks: Main tanks 1 and 4 are located behind #1 and #4 engines. Entry at the top of the wing, height 1 ft 7in, width 5 ft, length 6ft. Main tanks 2 and 3 are located behind #2 and # 3 engines. Entry at top of wing, height 2ft 2 in, width 6ft 3 in, length 12 ft. Auxiliary tanks located at wing root area. External tanks located under wing. External tank entry is confined space work on and off the aircraft, and wing tank work is confined space entry if the wing is on the aircraft of dropped for maintenance, modification or repairs

2.Tasks/Operations to be Performed: Task by PEG- 22512 fuel mechanics, 225 G1 sheetmetal mechanics and 225 H3 aircraft general mechanics.

Table 1.1.

225 I2	Cleaning out tanks (all tanks)	Permit Required	MEK/Acetone mix, jet fuel, purge fluid, trichloroethane, and benzene. Oxygen deficient atmosphere. LEL level. Entrapment, inhalation, ingestion, absorption and contact	3M FF supplied air respirator. Static resistant, tri-layer coveralls will be worn for operations that involve direct prolonged exposure. Standard cotton coveralls area acceptable for applications that do not generally have direct contact with fuel. Nitrile gloves, (butyl rubber gloves while using MEK and tricholorethane), MA1 Blowers and MultiRAE PLUS PID Tester.
225I 2	Changing O-ring (all tanks)	Permit Required/	Petrolatum, jet fuel, purge fluid, and benzene. Oxygen deficient atmosphere. LEL level. Entrapment inhalation, ingestion, absorption and contact.	Full Face or half face (HF) air purifying respirators with organic vapor (OV) cartridges. Static resistant, tri-layer coveralls will be worn for operations that involve direct prolonged exposure. Standard cotton coveralls area acceptable for applications that do not generally have direct contact with fuel. Nitrile gloves. Multi RAE PLUS PID Tester.

225I 2	Repair Leaks (all tanks)	Permit Required	Jet fuel, purge fluid, and benzene. Sealers Solvents (MEK/acetone mix, trichloroethane) Oxygen deficient atmosphere. LEL level. Entrapment, inhalation ingestion, absorption and contact.	Half face (HF) air purifying respirators with organic vapor (OV) cartridges. Static resistant, tri-layer coveralls will be worn for operations that involve direct prolonged exposure. Standard cotton coveralls area acceptable for applications that do not generally have direct contact with fuel. Nitrile gloves (when using desoclean) and butyl rubber gloves (when using MEK and trich.) splash proof goggles, MA1 Blowers and MultiRAE PLUS PID Tester
225 H3	Replacing foam, components, and other removed equipment (all tanks)	Permit Required	Jet fuel, purge fluid, and benzene Adhesives. Oxygen deficient atmosphere. LEL level. Entrapment, inhalation, ingestion, absorption and contact	Static resistant, tri-layer coveralls will be worn for operations that involve direct prolonged exposure. Standard cotton coveralls area acceptable for applications that do not generally have direct contact with fuel. Nitrile gloves. MultiRAE PLUS PID Tester
225 G1	Fuel cell entry- confined space, sealers, solvents, alodine, and primers	Permit Required	Sealers Solvents (MEK/acetone mix,	. Standard cotton coveralls area acceptable for applications that do not generally have direct contact with fuel. Nitrile gloves. Natural dilution ventilation, cotton coveralls, goggles, nitrile gloves, master entry plan

3. Chemicals Used:

Cleaning and Priming

Chemical: Sealant 8802/AMS-S-83318 Class A-16
Application: Brush /Gun
Quantity: 20 / 6 ounce tubes
Duration: Up to 24 hours, three 8 hour shifts

Chemical: MEK/Acetone Blend 6810P3101
Application: Wipe
Quantity: 6 ounces
Duration: 30 minutes to 1 hour

Chemical: Isopropyl Alcohol 6810-00-286-5485
Applications: Brush/Wipe/Spray
Quantity: 6 ounces
Duration: 30 minutes to 1 hour

Chemical Primer 804-00-1009-1562
Applications: Brush/Wipe
Quantity: 3 ounces
Duration: 1 hour

Chemical: Petrolatum 9150002500933
Application: Hand/Brush
Quantity: 4 ounces
Duration: N/A

Trouble Shooting:

Chemical: Top Coating 8030-00-166-8813
Application: Brush
Quantity: 1 pint
Duration: up to 5 hours

Chemical: Trichloroethane 6810-00-0561-1487
Application: Wipe/Spray
Quantity: 1 Quart
Duration: up to 1 hour

Chemical: Leak Detection 6850-00-185-0423
Application: Spray
Quantity: 12 ounces
Duration: 4 hours

4. Technical Data Required: Air Force T.O. 1-1-3, AFOSH Std 91-21, LAOI 92-25, C-130 T.O.s 1C-130H-2-28JG-10-1, 1C-130H-2-28JG-10-2-5 and the current Bio Survey.

5. Prevention of Unauthorized Entry: Confined Space Entry Point signs will be posted at aircraft in the direction of the most common approach, indicating which space is being entered. Attendant will monitor entry point.

6. Potential Hazards

6.1. Potential Hazard Description: Hazardous LEL and oxygen levels, entrapment. See hazards potential listed in Table 1.1. and paragraph 3.

6.1.1. Personal Exposure Conditions for Hazardous Substances: Solvents, sealants, adhesives and other chemicals approved for this MEP are permitted in quantities which will not cause the generation of a hazardous atmosphere. To further protect all entrants ventilation of the space is required before and throughout the entry. Failure of the ventilation system, observations of a change in condition of the space or the entrant or detection of early symptoms by the entrant will result in the space being evacuated or the attendant calling for immediate emergency assistance.

6.2. Control of Hazards: All hazards are controlled with methods consistent in the current Bio Survey, MSDSs on all products approved for use in this confined space and by applicable AFOSH Standards and technical orders. See Table 1.1. and Reference paragraphs 8.1 and 8.2.3. of this MEP

6.2.1. Chemical goggles will be used for eye protection. Exposure to the eyes will require immediate care at the closest eyewash station followed by medical assessment and care.

6.2.2. Exposure to skin will be limited by the use of tri-layer coveralls when fuel is present. Employees will use gloves and goggles, as stated in the current PEG survey. Change outs of the coveralls will be before moisture breakthrough. Used coveralls will be hung between use and exchanged when soiled or soaked through. Employees will wash hands, arms, and faces after entries and before drinking or using tobacco products.

6.2.3 Hazards from inhalation will be controlled by the use of respirators identified in the current respirator OI for this PEG

6.2.4. Fire hazards are eliminated by establishing and maintaining an LEL of 20% or 1200 ppm for foam removal, 10% LEL or 600 ppm for tank entry, and 5 % or 300 ppm or less when aircraft defueling and purging are completed. This is accomplished by the elimination of any spark producing tool or equipment and the use of continuous ventilating air into the space.

6.2.5. Confined space entrants must be cognizant of areas of the confined space in which they could become entangled , such as protruding tank structure, lines, conduits and converging areas of the interior of the tank.

7. Entry Permit: Required

7.1. Permit: AF Form 1024 Confined Space Entry Permit

7.1.1. Permit Requirements- Permit will not be issued until confined space meets requirements and acceptable entry conditions specified in paragraphs 8.1 through 8.2.3 are complied with.

8. Entry Procedures

8.1. Confined Space Isolation Methods/Lockout Tag out: Aircraft power must not be applied during fuel tank confined space entry until the aircraft is fully drained, purged, depuddled, mopped out, and fuel lines drained and a LEL of 5% or 300 ppm is maintained. Then power may be applied to the aircraft. Lock out tag out requirements will be In Accordance With (IAW) T.O. 1-1-3 paragraph 2.7.10 circuit breakers, power receptacles and SPR to be tagged to indicate maintenance is on going and 2.11.3.a. and e. all aircraft batteries are disconnected or made safe in accordance with the system particular technical order and tagged as required, and the aircraft external power receptacles and fuel control panel are tagged with AF Form 979 or 1492.

8.2. Acceptable Entry Conditions. Lock and tag out requirements listed in paragraph 8.1 must be complied with. The fuel tank must be drained, purged, depuddled, mopped out, and fuel lines

drained. The confined space must be continuously fresh air ventilated. LEL will be maintained at 10% or less for confined space entry (20% for foam removal) and oxygen content will be between 19.5 and 23.5 %. Respirators will be required. The availability of emergency rescue services must be confirmed. Call MAB Control at 7-2812 to confirm the availability of Hill AFB Emergency Rescue. If work is performed on graveyard shift in any facility other than Hangar 1, the authorizing supervisor will notify MA Customer Service, 7-3238 of the location of the aircraft and the start time of the entry. MA Customer Service will be notified at the completion or cancellation of the permit.

8.2.1. When working fuel equipped aircraft the LEL will be monitored continuously or checked every two minutes using a non continuous combustible meter. Readings will be taken at the entry point and progressively into the space.

8.2.2. Tanks will be continuously air ventilated when entered. IAW T.O. 1-1-3 paragraph 2.6.3.1. JP-8 vapor concentration must be measured using a photoionization detector (PID). A PID measures JP-8 vapor in parts per million (ppm). The concentration of JP-8 vapor must be below 600 ppm (10 % LEL) before tank entry is authorized.

Note*: Ventilation is the process of supplying fresh air to or exhausting air from a fuel tank once a tank is considered acceptably purged.*

Warning: If mechanical ventilation is interrupted the attendant will command entrant to exit the space immediately. The entrant will respond immediately to the command.

8.2.3. A respirator may still be required to prevent exposure to specific substances in accordance ith other health standards , An atmosphere which could have health effects from exposure, but will not cause incapacitation or limit the ability for self-rescue is not considered a hazardous atmosphere for a confined space.

9. Authorization

9.1. Confined Space Entry Team:

9.1.1. Entry Authorizing Supervisor: The work center employee, identified as the Entry Authorizing and Alternates in this MAB-001 MEP, will:

9.1.1.1. Maintain the organizational MEP.

9.1.1.2. Issue entry permits consistent with the MEP.

9.1.1.3. Revoke the permit and contact MAPE/MAB Safety when any entry conditions are not consistent with the MEP.

9.1.1.4. Determine that acceptable conditions are present at a permit space when entry is planned.

9.1.1.5. Ensure confined space team members are trained in the operation of atmospheric testing and monitoring equipment to evaluate the confined space for safe entry conditions.

9.1.1.6. Ensures confined space team members are properly trained and qualified in safe operating and emergency procedures, use of PPE and how to egress the confined space

9.1.1.7. Ensures confined space team members who are ill or are on medication that may affect their ability to safely perform assigned tasks, are excused from the operation and replaced.

9.1.1.8. Briefs workers on the hazards of the entry.

9.1.1.9. Inspect the work area, tools and equipment to identify and correct hazards.

9.1.1.10. Selects the PPE consistent with the current PEG survey.

9.1.1.11. Insure all lockout tag out and acceptable entry conditions listed in paragraph 8.1 through 8.2.3. are complied with.

9.1.1.12. Ensures that any equipment necessary to perform the entry task or to aid in an emergency rescue is readily available.

9.1.1.13. Determines the availability of the Fire Department Rescue team by calling MAB Control, 7-2812.

9.1.1.14. Authorize the confined space entry permit, making sure the entry permit is complete, dated and signed prior to entry.

9.1.1.15. Cancels the permit if conditions are no longer acceptable.

9.1.1.16. Never permit entry into an Immediate Danger to Life or Health (IDLH) atmosphere.

9.1.1.17. Establish a system for controlling entries.

9.1.1.18. Coordinates and briefs contractors on permit-required confined space entry.

9.1.2. Attendant:

9.1.2.1. Is responsible for monitoring the entry area and maintaining effective communication with entrant(s) and can easily summon help in the case of an emergency. Do not attempt rescue involving entry. Provide all possible support without entering the fuel cell or dry bay until the rescue team arrives. Attendants will have authority to order entrants to exit the space at the first indication of an unexpected hazard.

9.1.2.2. Comply with all requirements of the entry permit.

9.1.2.3. Limit entry to those authorized.

9.1.2.4. In the event of an emergency the attendant will order the evacuation of the space by all entrants and direct the runner to notify emergency response personnel. Emergency calls will be made by the runner, by calling 911 using the dock phone. If the aircraft is located on the ramp the runner will be equipped with a hand held radio, maintained at the distance required by the fuel safety zone and will call MAB Control or MA Alert and instruct the responding control center to make the 911 call. The runner will provide the exact location of the aircraft, the nature of the emergency and any other information when either phone call is placed.

9.1.2.5. Remain at the attendant's post and not leave for any reason except self-preservation unless replaced by an equally qualified person.

9.1.2.6. If an attendant is monitoring more than one entry all entrants must be ordered to evacuate the spaces in the event of any emergency in any of the spaces.

9.1.2.7. The attendant is authorized to assist the entrant in self-rescue if the assistance can be rendered without the attendant breaking the plane of the confined space.

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9.1.3. Entrant:

9.1.3.1. Must understand all procedures, safeguards and emergency egress/rescue procedures associated with the entry.

9.1.3.2. Alert the attendant to any changes or conditions and responds immediately to the attendant's evacuation orders.

9.1.3.3. Review the entry permit prior to entry ensuring acceptable entry conditions are valid.

9.1.3.4. Obey instruction from attendant, responding immediately to the attendant's evacuation order.

9.1.3.5. Notify the supervisor if any hazards are found that were not identified in the MEP.

9.1.3.6. Notify the supervisor if they are ill or on medication of any type.

9.1.4. Runner:

9.1.4.1. Respond to attendants request to notify the Hill AFB Emergency Rescue for assistance.

9.1.4.2. Direct the emergency rescue team to the location of the entrant.

10. TRAINING:

10.1. All members of the Confined Space Entry Team, Entry Authorizing Supervisor, Entrant, and Attendant will receive the following training:

MAW Course 0523 Confined Space Generic	Frequency: Initial Trainer: MAW	Trainer: MAW	Document AF Form 55

MABW C-130 Aircraft Confined Space Specific Course	Frequency: Annual	Trainer: MABW	Document AF Form 55
Respirator Fit Test and Training	Annual	75 AMDS/SGB and Supervisor	Document AF Form 55
Confined Space Awareness AF Form 55 Brief Item 20.	Initial and at least Annual	Trainer: Supervisor	Document AF Form 55
MAB Atmospheric Tester Course	Annual	Trainer: MABW	Document AF Form 55

Note: Non-fuels system personnel must have fuel system/tank familiarization training as well as the training listed in this MEP.

10.2. All MAB employees will receive Confined Space Awareness training as part of the AF Form initial and annual briefing. This briefing will be documented in block IV on the AF Form 55.

11. ENTRY EQUIPMENT AND LOCATION:

11.1. Atmospheric monitoring equipment MultiRAE Plus Photo Ionization Detector (PID), located in Special Equipment Crib.

11.2. MA-1 Blower with required filter to prevent the blower from picking up sand, dust and dirt and blowing it into the space. Filters in the assembly should be cleaned and replaced as required. . Blowers to be delivered at the work site by the AGE contractor.

11.3. The blower will be placed, and bonded to aircraft as required by T.O. 1-1-3 paragraph, 2-12.2. and t. 8-7.3. A complete approved equipment listing is found in T.O. 1-1-3 Table 8-1.

11.4. Static resistant, tri-layer coveralls will be worn for operations that involve direct prolonged exposure. Standard cotton coveralls area acceptable for applications that do not generally have direct contact with fuel. Coveralls are issued for the SSC located in 225.

11.5. Nitrile gloves are issued at the SSC.

11.6. Confined Space signs are located at the docks and will be in place at the aircraft during the entry indicating the space being entered.

11.7. See table 1.1. All respirators will be issued from the SCC IAW your current respirator fit letter.

11.8. Safety glasses eyewear with side shields for general tasks, chemical goggles when using liquids, face shield and safety glasses when grinding or drilling.
Available at SCC or from your supervisor.

Note: PPE required is also listed in the current PEG survey.

12. Testing:

12.1. Atmospheres will be tested and documented by the C-130 Confined Space Entry member using the listed PID and Oxygen tester following manufacturer instructions and in accordance with training on the use of the equipment. Testing results, times, make and model of the testing equipment, last date of calibration and name of employee performing the test will be annotated on the AF Form 1024.

Eagle	RKI Instruments Inc	Portable Multi-Gas Detector To be used until replaced by MultiRAE
MultiRAE PLUS	RAE Systems	Photo Ionization Detector (PID)

12.1.1. All personnel who perform tests must be certified by training on each type of testing equipment. Training will be documented in the employees AF Form 55.

12.2. Testing must be accomplished for oxygen levels first and then LEL content. This requirement exists because the tester will not display the proper LEL if there is not enough oxygen.

12.3. Concentrations of toxic materials will be evaluated during annual surveys by Bio Environmental Engineering.

12.4. Testing will be accomplished prior to starting the ventilating air and after the air has been turned on, and as required throughout the entry. Each time the space is tested the results and times will be recorded on the AF Form 1024. Testing will also be accomplished any time the ventilation air has been shut down and before reentry every time the confined space is vacated for any reason.

12.5. Aircraft which use JP-8 may not ,under certain circumstances, require purging and can have the LEL maintained at acceptable levels by ventilating the tanks. Entry-safe condition is 10 % LEL or 600 ppm or less. Tank shall be continuously ventilated during all entries.

13. Communication and Observation: The attendant will communicate with the entrant verbally. In the event of an emergency the attendant will direct the runner to notify the Hill AFB Emergency Rescue. See Rescue paragraph 14.

14. Rescue: The primary rescue plan for this MEP is self-rescue. The entrant and attendant will be aware of early symptoms that may include, but are not limited to headache, dizziness, weakness, loss of coordination or inability to respond to verbal communication or exit orders. Any of these or other symptoms will require the attendant to order the entrant to exit the space or will require the entrant to initiate self rescue. The entrant will respond to exit commands given by the attendant at any time during the entry.

14.1. OO-ALC/MAB has no organizational rescue teams. Consistent with the requirements of AFOSH 91-25 and AF TO 1-1-3, the 75 ABW /CEF is the primary rescue service for all MAB confined space entries.

14.2. If a command to exit is given and there is no response, or if a verbal communication is not answered by the entrant the attendant will immediately summon emergency help by directing the runner to notify the Hill AFB Emergency Rescue on the dock phone, cell phone or radio transmitter. Cell phones and radio transmitters must not be used within the fuel safety zone. Call 911 on base phones or 777-1911 from a cell phone to summon the Hill Fire Department Emergency Rescue Team. The person placing the call will give the dock location of the aircraft and the nature of the emergency. The attendant will remain at the entry point and continue to attempt to establish communication and assist the entrant without entering the confined space. When the emergency rescue team arrives, the runner will direct the emergency rescue team to the entrants location. Communication equipment design and Hazard Class will be IAW T.O. 1-1-3 Section III.

Warning: Cell phones and radio transmitters must not be used in the fuel safety zone

Note: *If a radio transmitter is used confirm its operating strength from the work area of the confined space. The radio will be maintained at the distance required by the fuel safety zone from the open fuel cells until they are purged and maintained at an entry safe LEL IAW T.O. 1-1-3 2-7.6.2.*

14.2.1. Any Personnel in the area will begin to move support equipment out of the way and place a stand or JLG for the rescue team to access the entry point. Hangar doors will be open to allow unobstructed entry by the Fire Department Rescue Team**.**

14.2.2. The entry permit will be posted at the nose of the aircraft and will be provided to the Fire Department Rescue Team when they arrive on scene.

14.2.3. The attendant will not leave the entry point until instructed by the Fire Department Rescue Team.

14.3. This MEP authorizes the cutting of openings by rescue personnel for access to spaces if that is the only means to reach an entrant.

14.4. 75 ABW/ CEF will be provided current copies of all MAB MEPs to facilitate training and rescue plans.

15. CONTRACTORS:

15.1. When a contractor is contracted to perform work that requires permit-required confined space entry, MAB Fuels Management will ensure the contractor is:

15.1.1. Notified in the statement of work that work will be performed in a permit-required confined space.

15.1.2. Briefed on emergency rescue responsibilities and the need to determine whether the contractor or the Base Fire department is expected to supply a rescue function.

15.1.3. Briefed on the contents of the space and know what makes the space permit-required and any potentially hazardous conditions associated in the area of the confined space. They must also be notified they must contact the entry supervisor or alternate identified in this MEP to review all existing permits for the space to be entered.

15.1.4. Briefed on precautions and procedures that have been implemented to protect Air Force workers.

15.1.5. MAB Fuels management will coordinate entry operations and procedures with the contractor and agree upon the permit space entry system to be used when both MAB organizational and contractor personnel will be working in the permit required space.

15.2. Contractors will be required to complete and post job specific confined space entry permits for all entries.

15.2.1. Contractors will brief MAB Fuel Shop management of any previously unknown hazards encountered or hazards that may have been introduced into the space as a result of the contract work.

16. Permit Routing and Control:

16.1. Copies of all canceled and/or completed permits must be provided by authorizing authority to the MAB Safety office on the last working day of each month MAB safety will maintain the permits for one year from date of entry.

17. Amendment to the MEP: The MEP must be reviewed at least once a year. Changes and amendments to the MEP other than spelling and grammar must be coordinated with the Entry Authority, OO- ALC/ MAB/Safety, Bio Environmental Engineering/75 AMDS/SGPB, Fire Department/75 ABW/CEF and Center Safety Office/ OO-ALC/SEG.

18. Coordination:

OO-ALC/MABC /Second Level	Date
OO -ALC/MABC Branch Chief	Date
OO-ALC/MAB Safety	Date
OO -ALC /SEG	Date
Bio Environmental/SGP	Date
Fire Department 75 ABW/CEFT	Date

Confined Space Entry Authorization

The following personnel in Fuels Maintenance Shops MABC and MABF are authorized to approve and sign Permit Required Confined Space Entries for work to be performed C-130 Fuels .

Name	Office Symbol	Primary/Alternate
	S/M SKILL	
Kevin Kennedy	MABCAC	Primary
Bruce Redmond	MABCAC	Primary
Rick Lund	MABCAC	Primary
Tracy Roby	MABCAC	Primary
Jeff Weaver	MABCAC	Primary
Greg Childs	MABCAC	Primary
Floyd Trujillo	MABCAC	Primary
Sam Martinez	MABCAC	Primary
Mitch Lawson	MABCAC	Primary
Teddy Morse	MABCAC	Primary
Ryan Stoddard	MABCAC	Primary
Mark Miller	MABCAC	Primary
Myron Roskelley	MABCAC	Primary
Rick Peterson	MABCAC	Primary
Kelly Bartlett	MABCAC	Primary
Andrew Hallberg	MABCAC	Primary
Brian Reinhold	MABCAC	Primary
Guy London	MABCAC	Primary
Kevin Hansen	MABCAC	Primary
Delfin Romero	MABCAC	Primary
Jeff Speer	MABCAC	Primary
Laroy Wright	MABCAC	Primary
Herschel Nay	MABCAC	Primary
Jim Clark	MABCAC	Primary
Jim Wempe	MABCAC	Primary
	AG SKILL	
Tolbert Akers	MABCAA	Primary
Gaynor Hiatt	MABCAA	Primary
John Jackson	MABCAA	Primary
Dave Angelo	MABCAA	Primary
Royd Moss	MABCAA	Primary
Randy Malan	MABCAA	Primary

Delmon Nelson	MABCAA	Primary
Charles Chadwick	MABCAA	Primary
Micheal Crow	MABCAA	Primary
Robert Curtis	MABCAA	Primary
Alan Jendrush	MABCAA	Primary
Ricky Rhoades	MABCAA	Primary
Kory Sunderland	MABCAA	Primary
Eugene Cato	MABCAA	Primary
Hardy Hegewald	MABCAA	Primary
Steve Jamison	MABCAA	Primary
	FUELS SKILL	Primary
Eldon Rice	MABCAM	Primary
Don Decker	MABCAM	Primary
Doug Green	MABCAM	Primary
Jimmy Simpson	MABCAM	Primary
Gary Hoag	MABCAM	Primary
Mike Wilson	MABCAM	Primary
Ignacio Perea	MABCAM	Primary
Robert Archuleta	MABCAM	Primary
Dwain Brown	MABCAM	Primary
Pete Gosnell	MABCAM	Primary
Scott Casas	MABCAM	Primary
Brian Stewart	MABCAM	Primary
William Spangler	MABCAM	Primary